APPENDIX C—APPROPRIATENESS OF THE ACCOMMODATIONS ALLOWED IN NECAP GENERAL ASSESSMENT AND THEIR IMPACT ON STUDENT RESULTS

The New England Common Assessment Program
New Hampshire + Rhode Island + Vermont

Appropriateness of the Accommodations Allowed in NECAP General Assessment and Their Impact on Student Results

1) Overview & Purpose:

To meet Federal peer review requirements for approval of state assessment systems, in the spring of 2006 New Hampshire, Rhode Island and Vermont submitted extensive documentation to the United States Department of Education on the design, implementation and technical adequacy of the New England Common Assessment Program (NECAP), a state level achievement testing program developed through a collaborative effort of the three states. In response to peer review finding, the states were required to submit additional documentation for a second round of peer review, including information on the use, appropriateness, and impact of NECAP accommodations. This report was prepared in response to the questions posed by the peer reviewers, and has been included in the 2007 NECAP Technical Report for other groups or individuals who may be interested in NECAP accommodation policies and procedures, and how well they have been working.

2) Report on the Appropriateness and Comparability of Accommodations allowed in statewide NECAP General Assessment

A. Who may use accommodations in NECAP assessment?

NECAP test accommodations are available to *all* students, regardless of whether or not a disability has been identified. Accommodations allowed are not group specific. For example, students in Title I reading programs, though not formally identified as "disabled" may still need extra time on assessments. Students with limited English proficiency sometimes break their arms and need to dictate multiple choice responses. Other students may need low vision accommodations even though they are not considered to be "blind". Before they are members of any subgroup, each student is first an individual with unique learning needs. NECAP assessment accommodations policy treats students in this way. The decision to allow *all* students to use accommodations, as needed, is consistent with prior research on best practice in the provision of accommodations (c.f., Elbaum, Aguelles, Campbell, & Saleh, 2004):

"…the challenge of assigning the most effective and appropriate testing accommodations for students with disabilities, like that of designing the most

effective and appropriate instructional programs for these students, is unlikely to be successfully addressed by disability. Instead, much more attention will need to be paid to individual student's characteristics and responses to accommodations in relation to particular types of testing and testing situations." (pp. 71-87)

The NECAP management team believes strongly that a fair and valid path of access to a universally designed test should not require that a student carry a label of disability. Rather, much like differentiated instruction, accommodated conditions of test participation that *preserve the essential construct of the standard being assessed* should be supported for *any* student who has been shown to need these differentiated test conditions. This philosophy is consistent with the NECAP team's commitment to building a universally accessible test that provides an accurate measure of what each student knows in reading and mathematics content.

The following critical variables drive the process of providing NECAP accommodations:

1. The decision to use an accommodation for an individual student must be made using a valid and carefully structured team process consistent with daily instructional practice, and

2. The accommodated test condition *must preserve the essential construct being assessed*, resulting in a criterion-referenced measure of competency considered to be comparable to that produced under standard test conditions.

B. Are NECAP Accommodations Consistent with Accepted Best Practice?

NECAP provides a Table of Standard Test Accommodations that was assembled from the experience and long assessment histories of the three partner states. The NECAP Table of Standard Accommodations was created by establishing a three state cross-disciplinary consensus reached with key expert groups: special educators, ELL specialists, and reading, writing and mathematics content specialists from each of the partner states.

In addition, the work of various stakeholder and research groups with special instructional expertise was also considered. These sources included:
- Meetings with state advocacy groups for students with severe visual impairment or blindness,
- Meetings with state advocacy groups for students who with deafness or hearing impairment, and consultations with other research-based groups like:
- The American Printing House for the Blind, Accessible Tests Division,
- The National Center on Educational Outcomes (NCEO), and
- The New England Compact Group, who conducted federally-funded enhanced assessment research on accommodations, in partnership with Boston College (inTASC group) and the Center for Applied Special Technologies (CAST).

The NECAP cross-disciplinary team, consulting with these other specialists, chose accommodations that were commonly accepted as standard, well established on a national basis, and that were consistent with assessment practice across all the NECAP states. Each identified standard accommodation was chosen to support best educational practice as it is currently understood.

Examples of the impact on accommodations design resulting from consultation with the American Printing House for the Blind experts in accessible test development included the addition to our standard accommodations of the use of an abacus in place of scrap paper for students with severe visual impairment. Recent research from the American Printing House for the Blind also indicated that 20 pt. font was producing better outcomes for students using large print accommodations (Personal communication, October, 2004). Based on this input, the NECAP team decided to provide a minimum of 20 pt. instead of 18 point font for large print editions of the NECAP assessment. This, in turn, led to improved production and type setting for large print NECAP tests. Consultation with advocacy groups for the deaf and hard of hearing led to improved item design, in particular helping item developers avoid the unnecessary use of rhyming words and homophones, supporting a decreased need for sign language accommodations with this group.

Impact of WIDA Partnership on development of Accommodations for LEP students. An important relationship exists between NECAP assessment and the NECAP partner states' active membership in WIDA/ACCESS for ELL's Assessment Consortium. New understandings in the area of accommodations policy and practice are beginning to emerge. For example, we have learned that word-to-word dictionary accommodations are most effective when used by LEP students at an intermediate level of proficiency and are not advised for beginning LEP students. The NECAP Accommodations Manual reflects this. Community learning opportunities created through the WIDA partnership have set a strong and supportive context for long term benefit and mutual growth potential. A wise investment has been made by the NECAP group in this effort.

During the last 2 years, assessment leaders from all three NECAP states, as active partners in the WIDA consortium developing the new ACCESS for ELLs Test of English Language Proficiency, have collaborated in a cross-disciplinary team process to establish accommodations policy for this English language proficiency assessment. The ACCESS for ELLs accommodations team was composed of ESOL teachers, special educators, measurement specialists, and SEA assessment leaders. All three NECAP states took an active role and learned much from this process. This joint development effort opened dialog across ELL and special education accommodation groups and continues to support the ongoing review and improvement of both ACCESS and NECAP accommodations. The states are learning from each other, and with each new development cycle, are improving the accommodations system. The community of professional practice in this area is growing. Best practice understandings are expanding with our increasing experience and communication about the needs of LEP student groups. Specifically, we are learning about the

importance of academic language to English Language Learners who are attempting to take the state-level general content assessments. Accommodations specific to this academic language support issue are being explored and considered. We are finding that vocabulary lists, practice tests, computer-based read-alouds and other supports and accommodations are eliciting positive responses from our LEP students who take the state content assessments. This will be addressed in more detail in a later section.

C.   How are NECAP Accommodations Structured?

Standard Accommodations: NECAP sorts standard accommodations into 4 categories (labeled A-D), which include: A) Alternative Settings, B) Scheduling and Timing, C) Presentation Formats, and D) Response Formats. School teams may choose any combination of standard (A-D) accommodations to use with any student so long as proper accommodation selection and usage procedure is followed and properly documented (see following subsection). Students who use standard accommodations on NECAP tests receive full performance credit as earned for the test items taken under these standard conditions. NECAP standard accommodations are treated as fully comparable to test conditions where no accommodation is used.

In addition, NECAP lists 2 additional categories of altered test conditions which require formal state level review and approval on a student by student basis. These special test conditions are: E) Other Accommodations and F) Modifications. (See: NECAP Accommodations, Guidelines and Procedures Training Manual, (2005), p 5, Available on state websites listed following references.)

Non-Standard Test Conditions – Review, Monitoring and Documentation of Preservation of the Intended Construct: "Other (E type) Accommodations" are accommodations without long or wide history of use that are not listed under the standard (A-D) categories. If schools wish to use accommodations that are not listed in A-D as standard, then they must send a formal written *Request for Use of Other Accommodations* to the State Department for review and approval for usage with an individual student. This request documents the team decision and describes fully the procedure to be used. Upon receipt by the SEA, these requests are thoroughly reviewed by state assessment content specialists together with special educators to determine if the accommodation proposed will allow performance of the essential constructs intended by the impacted test items. If the requested "other" accommodation is found to allow performance that will *not alter* the intended construct or criterion referenced standard to be assessed, then the school is issued a written receipt giving permission for use of this other accommodation as a standard accommodation for one test cycle. Schools are instructed on how to document the use of this approved "E) Other Accommodation" and the SEA monitors the process, ensuring that both school test booklets and state records accurately reflect the final test data. All "E) Other Accommodations" are approved in this way by the Department and, *if approved*, are treated as standard accommodations. Item responses completed under approved "E) Other" test conditions receive full credit as earned by the student.

If a requested "other" accommodation is found by the state review team to NOT preserve the intended construct, then the review team sends the school a receipt and notice that the requested change in test condition will be considered to be a test modification "F) Modification". All items completed under these test conditions will NOT receive performance credit. An example of a non-credited "F) Modification" would be any test condition where reading test passages, items, or response options are read to a student. State reading content specialists have determined that this change in a reading test condition does, in fact, alter the decoding construct being tested in all reading items. Therefore, reading items completed under this test condition would not be credited.

Use and approval of "E) Other Accommodations" are carefully monitored by the state. If any school claims use of an "E) Other Accommodation" that has not received prior state review and documented approval, then the test data documentation is similarly flagged to reflect that an F) Modification was instead provided. This flagged situation is treated as a non-credited test modification and the items impacted are invalidated. Further, any sections of the test completed under "F) Modification" conditions are later documented in student reports as not credited due to the non-standard and non-comparable test administration conditions used.

D. How does the NECAP Structure Guide Appropriate Use of Accommodations by Schools?

In 2005, New Hampshire, Rhode Island, and Vermont collaborated on the *NECAP Accommodations Guidelines and Procedures Training Manual*. The guide was disseminated through a series of regional test coordinator's workshops, as well as additional professional development opportunities provided by the individual states, and was also posted on each states website. This tool was designed to provide schools with a structured and valid process for decision making regarding the selection and use of accommodations for students on statewide assessment. Prior studies have outlined assessment guidelines that maximize the participation of students with disabilities in large-scale assessment. The National Center on Educational Outcomes (NCEO), in Synthesis Report 25 (1996), presented a set of criteria that states should meet in providing guidelines to schools for using accommodations (pp. 13-14, and 25). The NCEO recommendations figured prominently in preparation of the NECAP accommodations guide.

The *NECAP Accommodations Guidelines and Procedures Training Manual* (2005) meets all seven of the criteria established by NCEO as follows:

1. The decision about accommodations is made by a team of educators who know the student's instructional needs. NECAP goes beyond this recommendation and requires that the student's parent or guardian also be part of this decision team, (NECAP Accommodations Manual, pp. 2-3, and 20-22).

2. The decision about accommodations is based on the student's current level of functioning and learning characteristics. (Manual, pp20-22).
3. A form is used that lists the variables to consider in making the accommodations decisions, and that documents for each student the decision and reasons for it. (Manual, pp. 20-22).
4. Accommodation guidelines require alignment of instructional accommodations and assessment accommodations. (Manual, pp2 and 20-22).
5. Decisions about accommodations are not based on program setting, category of disability, percent time in the mainstream classroom (Manual, p.15, p.20-22).
6. Decisions about accommodations are documented on the student's IEP or on an additional form that is attached to the IEP. (Manual, pp.2, 15, and 20-22).
7. Parents are informed about accommodation options and about the implications for their child (1) not being allowed to use the needed accommodations, or (2) being excluded from the accountability system when certain accommodations are used, (Manual pp 3 and 20-22).

As described above, NECAP states use a highly structured process for the review, approval, and monitoring of requests by schools for the use of other (non-standard) accommodations for individual students. As described in section B, above, the NECAP Accommodations Manual provides a Table of Standard Accommodations each year. The manual provides two structured decision making worksheets (pp. 20-22) to guide the decision process of educational teams. One worksheet guides the selection of standard accommodations; the second provides guidance on the selection of other accommodations. The manual contains information on the entire decision making process. In addition, the manual provides detailed descriptions and research-based information on many specific accommodations.

Ongoing Teacher Training and Support: Throughout each academic year, several teacher workshops on planning and implementing accommodations are offered at multiple locations regionally in each of the three states to teams of educators. In the spring of 2005, prior to the launch of the first NECAP assessment, a series of introductory statewide 2-hour workshops in accommodations administration was offered in multiple locations. Each year thereafter, in late summer prior to the administration of the NECAP tests, a series of accommodations usage updates is offered as part of the NECAP Test Administration Workshop series; five regional workshops are offered in each state. Additionally, each state's Department of Education has consultants who are available to provide individualized support and problem solving, as well as small and large group in-service for schools. Finally, the DOE assessment consultants work directly with a variety of statewide groups and organizations to promote the use of effective accommodations, and to gather feedback on the efficacy of the NECAP accommodation policies and procedures. These include University-based Disability Centers, statewide parent advocacy organizations, organizations representing individuals with vision and hearing disabilities. Finally,

each state has systems in place to provide schools with individualized support and consultation: New Hampshire employs two distinguished special field educators who, by appointment and free of charge, provide onsite training and support in alternate assessment and accommodations strategies. Rhode Island has an IEP Network that provides on-site consultation with schools on a variety of special services topics including planning and implementing assessment accommodations. Vermont has a cadre of district-level alternate assessment mentors who provide a point of contact for disseminating information, and who are also available in schools and school districts for intensive consultation related to the assessment needs of individual students.

Monitoring of the Use of Accommodations in the Field: Each year during the NECAP test window, the DOE content specialists schedule a limited number of on-site visitations to observe test administration as it is occurring in the schools**.** State capacity to provide such direct monitoring during the test window is limited, but such monitoring is conducted during each test window and observers report observations directly to the state assessment team. Additional on-site accommodations monitoring is provided by district special education directors and the NECAP test coordinators. Both of these groups also receive training each year. Throughout each school year, program review teams from the DOEs' special education divisions conduct on-site focused monitoring of all special education programs. These comprehensive visits include on-site monitoring of the use of accommodations for students who have Individualized Educational Programs (IEPs).

E. Are NECAP Accommodations Consistent with Recent Research Findings?

The NECAP development team has attempted to learn from the research on accommodations, but this has not been a simple matter. In 2002, Thompson, Johnstone, and Thurlow concluded in their report on universal design in large scale assessments that research validating the use of standard and non-standard accommodations has yet to provide conclusive evidence about the influence of many accommodations on test scores. In 2006, Johnstone, Altman, Thurlow, & Thompson published an updated review of 49 research studies conducted between 2002 and 2004 on the use of accommodations and again found accommodations research to be inconclusive. They noted the similarity to past findings from NCEO summaries of research (Thompson, Blount & Thurlow, 2002).   The authors of the 2006 review state:

> "Although accommodations research has been part of educational research for decades, it appears that it is still in its nascence. There is still much scientific disagreement on the effects, validity, and decision-making surrounding accommodations." (p 12)

However, a frequently cited research review by Sireci, Li, & Scarpati, (2005) documented evidence of support for the accommodation of providing extended time. This accommodation is one of the most frequently used standard NECAP accommodations. Extended time accommodations appeared to hold up best under the

interaction hypothesis for judging the validity of an accommodation.   In a 2006 presentation addressing lessons learned from the research on assessment accommodations to date, Sireci and Pitoniak, (2006), concluded that, in general, "accommodations being used are sensible and defensible." They replicated their prior finding that the extended time accommodation seems to be a valid accommodation and noted that many other accommodations have produced less convincing results. They noted that oral or read-aloud accommodation for math appears to be valid, but that a similar read-aloud accommodation for *reading* involves consideration of specific construct changes which threaten score comparability. These findings are also consistent with and support the NECAP accommodation policy of allowing the read-aloud accommodation for mathematics, but not allowing this accommodation for reading tests. Despite the inconclusive and conflicting current state of accommodations research, findings seem to be emerging that do, in fact, provide validation for some of the most frequently used NECAP accommodations: the extended time and mathematics read-aloud accommodations.

Accommodations for English language learners. In a presentation on the validity and effectiveness of accommodations for English language learners with disabilities, Abedi (2006) reported that students who use an English or bilingual dictionary accommodation (word meanings allowed) may be advantaged over those without access to dictionaries and that this may jeopardize the validity of the assessment. Abedi argues persuasively that linguistic accommodations for English language learners should *not* be allowed to alter the construct being tested. He also argues that the language of assessment should be the same language as that used in instruction in the classroom – otherwise student performance is hindered. NECAP assessment policy is consistent with both of these findings: ELL students may use word-to-word translations as linguistic accommodation support, but may not use dictionaries with definitions provided. Abedi's research supports this decision. Also NECAP assessment items are not translated into primary languages for ELL students. This, too, is consistent with classroom practice in the NECAP states and is supported by the current literature.

At the same conference referenced just above, Frances (2006), presented findings from a meta-analysis in which he compared the results of eleven studies of the use of linguistic accommodations provided for ELL students in large scale assessments. In his presentation, given at the LEP Partnership Meeting in Washington, DC, he noted that *no significant differences in student performance were observed for 7 of the 8 most commonly provided linguistic accommodations.* Although Frances was not recommending its use, the *only* linguistic accommodation that showed any significant positive effect on the performance of ELL students was an accommodation allowing the use of an English dictionary or glossary during statewide assessment. This is the very same accommodation that Abedi (2006) recommends *against* using because it violates intended test constructs. As noted above, in NECAP assessment, the use of word-to-word translations is an allowed standard linguistic accommodation. However, the use of an English dictionary with glossary *meanings is not* an allowable standard accommodation.   It is the position of the NECAP reading content team that

allowing *any* student to use a dictionary with definitions or a glossary of meanings violates the vocabulary and comprehension constructs intended in the NECAP reading test and would invalidate test results. For this reason, NECAP does not allow this linguistic accommodation.

As reported by Frances, analysis of the remaining 7 linguistic accommodations typically allowed for ELL students showed *no significant positive effect* on test performance. These included: bilingual dictionary use, dual language booklets, dual language questions and read-aloud in Spanish, extra time to test, simplified English, and offering a Spanish version of a test. Despite the lack of positive effects observed for these other linguistic accommodations to date, NECAP does provide a number of linguistic supports for ELL students. One of these linguistic supports includes: employing the universal design technique of simplifying the English in *all* test items. Review and editing of test items for language simplicity and clarity has been a formal part of the annual process of test item development and review since the inception of the NECAP. In addition to word-to-word translations, a number of other standard linguistic accommodations are allowed in NECAP testing to provide a path of access for ELL students to show what they know and can do in reading and mathematics. Standard linguistic accommodations permitted by NECAP include: allowing mathematics test items to be read aloud to the student, allowing students to read aloud to themselves (if bundled with an individual test setting), translation of test directions into primary language, underlining key information in written directions and dictation/ scribing of reading and math test responses. NECAP assessments provide linguistic access for students who are English language learners.

As noted earlier, a number of studies have shown some positive effect of the use of the extended time and read-aloud accommodations for students in general. As ELL students continue to gain proficiency in English, they may also increasingly benefit from these accommodations. More research is needed to clarify how states can most appropriately support ELL students to show us what they know and can do.

NECAP Supported Research Studies: Through the New England Compact Enhanced Assessment Project (2007), the NECAP states have completed a number of accommodations and universal design research studies. These studies have shed additional light on the appropriateness of existing standard accommodations and have helped to inform the development of new accommodations and improved universal design of assessment. Under the Enhanced Assessment Grant, in joint partnership with: the inTASC group of Boston College, the Center for Applied Special Technologies (CAST), the state of Maine, and the Educational Development Center, Inc., the NECAP states supported research studies on accommodations and universal design in four distinct areas. These studies, summarized below, are described more fully in the appendix to this report:

➢ **Use of computer-based read-aloud tools.** NECAP supported a study of 274 students in New Hampshire high schools. This study, Miranda, H., Russell, M., Seeley, K., Hoffman, T., (2004), provided evidence that computer–based read

aloud accommodations led to improved content access and performance of students with disabilities when taking mathematics tests.

As direct result of this study, New Hampshire was able to build and pilot a new computer-based read aloud tool that is now under development for use with NECAP assessments for all three NECAP states. Following this New Hampshire pilot of the new computer-based read aloud tool on the state high school assessment, the New Hampshire Department of Education conducted a focus group study with participating students from Nashua North High School. The results of this focus group (May 17, 2006) are available from the New Hampshire Department of Education. One of the primary findings from this focus group was the strong impact of having experienced the read-aloud in practice test format prior to actual testing. Experience with this tool *prior to testing* appeared to be very important for student performance. High school students indicated a *very strong* preference for computer-based read aloud over the same accommodation provided by a person. Both groups of students, those with limited English proficiency and those with disabilities consistently reported that they were able to focus much more clearly on the math content (not just the words) than in prior math tests they had taken without this accommodation. Based on student report, use of this read-aloud seemed to improve content access for these students. The ability to benefit from the individual work of each of the three NECAP states is a major benefit of the tri-state partnership.

➢ **Use of computers to improve student writing performance on tests.** Another research study conducted by Higgins, J., Russell, M., & Hoffmann, T., (2004), studied 1000 students from the three states to examine how the use of computers for writing tests affected student performance. The study found that minority girls tended to perform about the same whether using a computer or pencil-and-paper to provide written responses. However, *all other groups*, on average, tended to perform better when using a computer to produce written responses. A minimum degree of keyboarding skill correlated with improved performance. Lack of keyboarding skill produced results that did not significantly differ from pencil-and–paper responding and therefore, appeared to 'do no harm'. As a result, NECAP states entered into talks to determine how a computer based response might be more fully supported in future versions of the assessment. The study suggested that a minimum number of words typed accurately per minute of 18-20 was the recommended threshold to obtain benefit from this accommodation. This finding has been incorporated into NECAP training and support activities. At the present time, NECAP allows use of a word processor to produce written test responses as a standard accommodation on all NECAP content tests. The research supports this practice.

➢ **Use of Computers for Reading Tests**. A third study conducted by Miranda, H., Russell, M., & Hoffmann, T., (2004), examined how the presentation of reading passages via computer screen impacted the test performance of 219 fourth grade students from eight schools in Vermont. This study found no significant

differences in reading comprehension scores across the 3 (silent) presentation modes studied: 1. Standard presentation on paper, 2. On computer screen with use of a scrolling feature, and 3. On computer with passages divided into sections presented as whole pages without the scrolling feature. Results from this study were not conclusive, but some trend data suggested that the scrolling presentation feature may disadvantage many students, especially those with weaker computer skills. The majority of students indicated an overall preference for computer-based presentation over pencil-and-paper. As other research studies, previously cited, continue to show that read-aloud accommodations are generally effective, it can be expected that pressure to offer computer-based read-alouds involving text presentation will increase. Additional research in this area may help shed important light on the most effective ways to provide this useful accommodation. (See also: Higgins, J., Russell, M., & Hoffmann, T., (2004).)

➢ **Use of Computer-Based Speak-Aloud Responses to Short Answer Items**. The states' enhanced assessment grant also supported a study by Miranda, H., Russell, M., Seeley, K., Hoffman, T., (2004) that looked at the feasibility and effectiveness of using a computer to transcribe spoken responses into written text in response to short answer test items. This was considered as a possible linguistic accommodation for use with English language learners in reading and mathematics tests. Unfortunately, this study found that it is not yet feasible to use computers to record student's verbal responses to short-answer items. A variety of technical problems occurred and students were not comfortable in speaking to the computer. The researchers concluded that, with existing technology limitations, use of this kind of computer based accommodation may not be feasible for some years.

F. What evidence has the state gathered on the impact and comparability of accommodations allowed on NECAP test scores?

Direct and Immediate Score Impact. First, as a matter of policy, there is a direct and immediate impact on NECAP test scores for students when standard accommodations (accepted *and credited* as comparable) vs. non-standard accommodations (not accepted *and not credited* as comparable) are used during test administration. The student performance score is significantly reduced for each subtest where test items and the constructs they were designed to measure have been modified by use of a non-standard accommodation. Sessions with modified items receive no credit in the student total score for that content area. If the entire reading test is read to a student, the student will earn 0 points in that content area. If only certain sessions of the reading test are read to the student, then only the score of those sessions will be impacted, but this will result in a lower overall reading content score.

Empirical bases for Comparability of NECAP Test Scores Obtained from Accommodated vs. Non-Accommodated Test Conditions: During the NECAP Pilot Test in 2004, differential item functioning (DIF) analyses were conducted on the use of accommodations by various student subgroups. In December 2006, the

NECAP Technical Advisory Committee (TAC) reviewed the use of these DIF analyses and discussed long range planning for ongoing review of the use of accommodations in NECAP assessment. There was consensus among TAC members that the current use of DIF analyses for evaluation of accommodation use allows very limited inferences to be made therefore is of minimal practical value to the states. Other general methods of organizing and reviewing accommodations data and performance outcomes should be developed for states to employ.

A NECAP TAC subgroup was formed to consider and respond to the following question: What should NECAP states be doing at this stage in our development to review use, appropriateness, design, etc, of the NECAP Accommodations and related policy & guidelines? What information and processes will help us learn, clarify & communicate how, why, and when to use what accommodations? The results of this December 2006 TAC accommodations workgroup are available on each of the three states' websites. In summary, the TAC workgroup recommended 5 categories of activity for the NECAP states:

1. Given what states have learned from initial implementation and recent research, they should review, revise, describe and more fully document NECAP Accommodations Policies and Guidelines. This should be part of an ongoing review process.

2. Explore available research on questionable or controversial accommodations. Document this review and revise where indicated.

3. Transparency of reporting should be examined. There was group consensus that the use of accommodations during assessment should be fully disclosed, and thereby made transparent in the reporting process. NECAP states should work to sort out this aspect of reporting policy and determine where and how to report what aspects of accommodation usage to parents and to the public at large.

4. States need to further address monitoring of accommodation usage. Find ways to improve the quality of district/school choices in the selection and use of accommodations for students. Strategies that take limited state resource capacity into account must be considered. The issue is fundamentally one of putting improved quality control processes in place in the most efficient, cost effective ways. Several resources currently under development may assist the states in this effort. One of these resources in already being developed in the OSEP funded General Supervision Grant to one of the NECAP states. This grant will develop digitized video clips illustrating proper ways to provide certain accommodations, especially for students with severe disabilities. Creation of this video tool may enhance state capacity to provide and distribute effective training to districts and improved local monitoring of day to day use of accommodations for both instruction and assessment.

5. Available data needs to be mined and organized on the current use of accommodations in NECAP testing. Usage and outcomes for various subgroups

should be examined. DIF analyses may not be as useful in this regard as other types of carefully planned descriptive comparisons.

Some research concerns were also identified. How do states differentiate between an access issue for a student – where the student has skills they cannot show as opposed to a lack of opportunity to learn or lack of skill development?   This issue appears repeatedly in a number of research studies reviewed. It is not a simple matter to differentiate between these situations. One indicates a need for an assessment design change. The other indicates a need for instructional change. Research to help sort this out should be supported.

Test Access Fairness as One Kind of Evidence for Comparability:

NECAP states have made a commitment to work with stakeholders representing various groups of students who typically use accommodations or who may benefit from improved universal assessment design. The feedback received from these stakeholder groups is a valuable source of information and ideas for continued improvement of our assessment program.

NECAP consults regularly with experts in accessible test design at the American Printing House for the Blind in Lexington, KY (Allman (2004), and Personal Communications: (October 2004), (September 2006)).   This group has informed NECAP management about the recent research in the use of larger print fonts and the abacus as standard accommodations for students with severe visual impairments. This consultation has directly impacted test development and has resulted in positive feedback from the stakeholders who represent students with visual impairment in our states.

In addition, all three states work closely with stakeholders representing students with hearing impairment and deafness to help inform test item development and improved access to test items for students with vision or hearing impairments. An example of this commitment is contained in two focus group reports prepared by the New Hampshire Department of Education; a February 2006 focus group report from NH Teachers of the Visually Impaired (TVI) on NECAP Test Accessibility for Students with Severe Visual Impairment and a May 2006 report on the performance of English language learners and students with disabilities for the on the Grade 10 New Hampshire Educational Improvement & Assessment Program (NHEIAP). The latter of these two reports addressed computer-based read aloud accommodation for mathematics assessment. *(Both Focus Group Reports are available from the New Hampshire Department of Education).*

NECAP states are also pursuing other grant–funded research to support and explore development of new comparable accommodations that might provide meaningful access to general assessment at grade level for students who currently take only alternate assessments based on alternate achievement standards.

G. Summary of the Evidence - Are NECAP Accommodations Appropriate and Do They Yield Reasonably Comparable Results?

- Yes, it is clear from the evidence cited in sections 2 A, B, C and D above, that NECAP accommodations are highly consistent with established best practice.

- For accommodations with a consistent research basis available, research evidence suggests that continued use of the following accommodations in NECAP testing is valid:
  - Extended time accommodation
  - Mathematics Read-Aloud Accommodation
  - Word-to-word translation for ELL students
  - Use of Computer-Based Read-Aloud Tools (for mathematics)
  - Use of Computers to write extended test item responses (NECAP accommodation -D1)

- Preliminary research evidence from The New England Compact Enhanced Assessment Project, presented above (2004), does not appear to support improved student performance with NECAP accommodation D6- Using assistive technology (specifically speech-to-text technology) to dictate open responses via computer.   However, if consistently used in classroom settings for students with severe access limitations, sufficient familiarity may be gained to make this a viable accommodation for certain students. Further review of this accommodation by the NECAP management team is recommended.

- Early focus group results (NHDOE, May 17, 2006) and trial experience with computer-based read aloud testing is very promising and merits further research.

- NECAP Focus group responses (NHDOE, February 22, 2006) from Teachers of the Visually Impaired support existing NECAP accommodations and are helping inform improvement in other aspects of universal design of items, test booklets and materials.

- Structured DIF analysis of the performance of NECAP accommodations is in an early and inconclusive phase. Currently, development of other increasingly useful accommodations data analysis designs is going forward and is supported by all NECAP states. The NECAP Technical Advisory Committee (TAC) will continue to explore this line of inquiry in the future.

- As each yearly cycle of large scale NECAP DIF item analysis allows the group to gain insight and to clarify questions, the design of future DIF data collection may be refined to more fully inform item selection to improve the fairness and accessibility of NECAP assessment items. This exploration is highly valued by the NECAP management group and will continue to be supported. Limitations in this kind of statistical analysis will continue to occur when sample sizes are too small to draw reliable or useful conclusions.

- NECAP states are developing an ongoing review and improvement process for the NECAP accommodations policy and procedures.

Concluding Comment:

NECAP Commitment to Universal Design and Continuous Improvement. The NECAP management group has made a solid commitment to continuously improve and strengthen the universal design of our assessment instruments. As the quality of universal design elements of the NECAP assessment continues to improve, it is conceivable that the number of students who need to use accommodations may decline. In fact, this is a worthy goal. Although this would cause diminishing sample sizes and challenges for accommodations analysis, declining use of accommodations due to improved universal accessibility in overall test design would be viewed as a very positive outcome. Since its inception in 2003, the NECAP group has supported and funded research and development in accommodations policy and procedures. This is evidenced by the many research activities generated through the multiple Enhanced Assessment Grants of the three participating states referenced earlier in this report.

The NECAP group has shown leadership in obtaining funding and actively supporting accommodations and related research in a number of areas:

1. Describing the performance of students in the assessment gap and exploring alternate ways of assessing students performing below proficient levels (see: *New England Compact Enhanced Assessment Project: Task Module Assessment System- Closing the Gap in Assessments*),
2. Research in the design and use of accommodations *(New England Compact Enhanced Assessment Project: Using Computers to Improve Test Design and Support Students with Disabilities and English-Language Learners)*,
3. The relationships among and between elements of English language proficiency test scores, academic language competency scores, and performance on NECAP academic content tests *(Parker, C. (2007))*,
4. Defining and developing technical adequacy in alternate assessments *(NHEAI Grant)*,
5. Developing improved accommodations that will foster increased participation in general assessment for students currently alternately assessed *(Jorgensen & McSheehan, (2006)), and*
6. All three NECAP states are partners in the ongoing development of the new *ACCESS for ELLs^{TM}* Test of English Language Proficiency. The Vermont Test Director is a member of the Technical Advisory Committee

The NECAP Development Team has been very busy. These efforts are ongoing and will continue. We are committed to the long-term development of a well validated and highly accessible assessment program that meets the highest possible standards of quality. More importantly, we are committed to the establishment of an assessment system that effectively supports *the growth of each and every one* of our students.

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The New England Compact Enhanced Assessment Project: Task Module Assessment System. ©1994-2007 by Education Development Center, Inc. All Rights Reserved. http://www.necompact.org/research.asp

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Additional Resources:

Rhode Island Department of Education, NECAP Assessment Website:
http://www.ridoe.net/assessment/NECAP.aspx

Vermont Department of Education, NECAP Assessment Website:
http://education.vermont.gov/new/html/pgm_assessment.html

New Hampshire Department of Education, NECAP Assessment Website:
http://www.ed.state.nh.us/NECAP